AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 15, line 5 with the following paragraph.

"The wind turbulence models 231 of the illustrative embodiment of the present invention implement both the low and medium/high altitude models from the military specifications MIL-F-8587C and MIL-HDBK-1797. The low and medium/high altitudes are defined as altitudes below 1000 feet and above 2000 feet, respectively. The wind turbulence models 231 of the illustrative embodiment of the present invention provide wind turbulence models for the transition region between the low and medium/high altitudes, i.e. an altitude above 1000 feet and below 2000 feet, which is not defined within the military specification MIL-F-8587C and MIL-HDBK-1797. In order to provide a turbulence model that is continuous in altitude, a transition method is required to determine the values for the wind turbulence models in the transition region. A transition method can consist of linearly interpolating between the values of the wind turbulence models at the boundary altitudes, that is, 1000 feet and 2000 feet. For example, the turbulence velocities and turbulence angular rates are determined by the specifications provides in the military specification MIL-F-8587C and MIL-HDBK-1797 at the altitudes of 1000 feet and 2000 feet. The values for the wind turbulence model in the transition region are generated by linearly interpolating between the value from the low altitude model at 1000 feet transformed from mean horizontal wind coordinates to body coordinates and the value from the high altitude model at 2000 feet in body coordinates. Users can choose stability coordinate systems instead of the body coordinates. One of skill in the art will appreciate that the coordinate system of the region may be implemented in other coordinates, such as earth coordinates. FIGURE 2D is a computer display view 240 showing an exemplary block diagram for interpolating wind velocity in the transitional region. The signal 241 is a bus signal that contains both the medium/high velocity 243 and low altitude velocity 242. The low altitude velocity 242 is applied to a wind to body transformation block 244 to transform the wind coordinates of the low velocity 242 to body coordinates. The velocity 246 in the transition region is generated by linearly interpolating between the transformed low velocity 245 and the medium/high velocity 243. This method also applies to the angular rates. One of skill in the art will appreciate that the transition region and transition method are not limited to a single region and method."

Please replace the paragraph beginning at page 19, line 29 with the following paragraph.

"If users click on the model 311 for equations of motion that represents 6DoF, a user interface is provided for entering parameters of the 6DoF model. FIGURES 4D and 4E shows an illustrative computer display of the graphical user interface 440 provided in response to the users' clicking of the 6DoF model 311 depicted in FIGURE 3A. The graphical user interface 440 provides blanks for entering parameters including units, mass type, presentation, etc. In order to enter the mass type, the graphical user interface provides a menu 443 in response to clicking a button 441. The menu includes the fixed, simple variable and custom variable types. In FIGURE 4E, in order to enter the representation, the graphical user interface ~~440~~450 provides a menu 453 in response to clicking a button 451. The combination of the mass type and the representation provide the 6DoF models depicted in FIGURE 2F. The 6DoF models provided by the combination of the mass type and the representation in the menus 443 and 453 may be extended by users so that users may add to the menus 443 and 453 another 6DoF model. If the user selects a 6DoF models provided at the menus 443 and 453, the selected 6DoF model is incorporated from the model storage 110 into the aerospace and aeronautic system that the users design and execute."